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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,206	04/20/2001	Kazuyuki Yoshida	Q64192	9382

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2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

SANDOVAL, KRISTIN D

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/838,206

Applicant(s)

YOSHIDA ET AL.

Examiner

Kristin D. Sandoval

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 14, 15, 17-26, 29, 30, 32, 33, 35, 36, 38, 39 and 41-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 15, 17-26, 29, 30, 32, 33, 35, 36, 38, 39 and 41-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/19/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-11, 14, 15, 17-26, 29, 30, 32, 33, 35, 36, 38, 39 and 41-47 are pending. Claims 12, 13, 16, 27-28, 31, 34, 37 and 40 are cancelled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 19, 2006 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-11, 14, 15, 17-26, 29, 30, 32, 33, 35, 36, 38, 39 and 41-47 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-11, 14, 15, 17-26 and 41-43 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1-11, 14, 15, 17-26 and 41-43:

The use of the wherein clause denotes function that further limits the scope of the claim. If used in an apparatus claim, the wherein clause should further limit the structure of the apparatus and if used in a method claim the claim must clearly and explicitly describe the active steps needed in order to achieve the desired result (See MPEP 2111.04). For example, the apparatus claim 1 states, “wherein the generated substitute information has a data length within a range correctable by an error correction capability...” which is merely remarking on a characteristic of the substitute information and not further limiting the structure of the apparatus. In addition, the method claim 29 also recites this limitation which, again, is a recitation of a desired characteristic of the substitute information and is not a desired result with explicit steps as to how to obtain the desired result. The remaining apparatus claims containing wherein clauses continue to state functionality as opposed to further limiting the *structure* of the apparatus, such as the limitation in claim 2, “...wherein the substituting device substitutes part of the generated encrypted recording information...” This merely states what the device, which is part of the apparatus, *does*, it does not further limit the actual structure of the apparatus.

Claims 14, 15, 17-26, 32, 33, 38, 39 recites the limitation "wherein the substitute position of the part of the recording information is different from the substitute position of a part of other recording information". There is insufficient antecedent basis for this limitation in the claim. A substitute position for other recording medium was never established and it is unclear whether the other recording information is information recorded on the same recording medium or if the substitute position is on another recording medium.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 8-11, 14, 15, 17-20, 25, 26, 32, 33, 35-36, 38-39 and 41-47 rejected under 35 U.S.C. 102(b) as being anticipated by Osawa et al., U.S. Patent No. 5,930,367.

1. Regarding claims 1, 29, and 35, Osawa et al., U.S. Patent No. 5,930,367, disclose an information recording device, medium, and method comprising generating substitute information by using identification information unique to a recording medium, substituting part of the recording information which is generated as a unit of error correction, with the generated substitute information and recording the generated substituted information in the medium corresponding to the identification information, wherein the generated substitute information is correctable by error correction and the substitute position can be changed (4:30-5:17 wherein the parity bits that represent error correction represent recording information and the place or sector at which the substitute information is placed is the substitute position, 12:16-21 wherein manufacturer ID would be an ID unique to the recording medium).
2. Regarding claims 2, 30, and 36, Osawa et al. disclose encrypting the recording information, substituting part of the encrypted information with the generated substitute information and recording the key information and the generated substituted recording information in the medium (6:59-7:7, 5:1-5).
3. Regarding claim 3, Osawa et al. disclose generating the substitute information including the key information (4:66-5:4 wherein the substitute information is the identification information

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and thus, since the information could be the cipher key, the substitute generator generates both the substitute information and the cipher key).

4. Regarding claims 8 and 25, Osawa et al. disclose a device for adding a correction code for error correction to the recording information wherein the substituting device substitutes the generated substitute information for part of the added record information to generate the substitute recording information (4:47-65).

5. Regarding claims 9, Osawa et al. disclose recording identification information (7:8-18).

6. Regarding claim 10, Osawa et al. disclose the identification information recorded in advance and the substitute information generating device detects the recorded identification information to use it for the generation of the substitute information (6:12-36, 7:8-18).

7. Regarding claim 11, Osawa et al. disclose varying a mode of substitution by using the identification information (6:64-7:7).

8. Regarding claim 14, Osawa et al. disclose an information recording medium comprising an information recording region for recording the information which is generated as a unit of error correction, part of which is substituted with the substitute information, and identification recording region for recording the identification information wherein the generated substitution information is correctable by error correction and the substitute position of the part of the recording information is different from the substitute position of a part of other recording information (4:30-5:17 wherein the parity bits that represent error correction represent recording information and the place or sector at which the substitute information is placed is the substitute position and other recording medium are recorded on a different recording medium, therefore the

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position is different since its on a different recording medium, 12:16-21 wherein manufacturer ID would be an ID unique to the recording medium).

9. Regarding claim 15, Osawa et al. disclose encryption of the recording information by using predetermined key information (9:53-11:23).

10. Regarding claims 17, 32, and 38, Osawa et al. disclose a reproducing method comprising detecting the substituted recording information and identification information, and extracting the substitute information and identification information, comparing the identification information extracted from the substitute information with the detected identification information; and reproducing the recording information only if the extracted identification matches the detected information (7:19-9:52, wherein the place or sector at which the substitute information is placed is the substitute position and other recording medium are recorded on a different recording medium, therefore the position is different since its on a different recording medium).

11. Regarding claims 18, 33, and 39, Osawa et al. disclose encryption of the recording information using a predetermined key information; the key information and the obtained substituted recording information are recorded in the information recording medium; detecting the key information; and decrypting the encrypted recording information obtained from the detected substituted recording information only if the extracted identification matches the detected information (7:19-9:52).

12. Regarding claim 19, Osawa et al. disclose the key information contained in the substitute information and recorded in the medium, and detected from the extracted substitute information (7:19-9:52).

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13. Regarding claim 20, Osawa et al. disclose encrypting the key information by using the identification information, and recording the encrypted key information in the medium; detecting the encrypted key information from the medium, and generating the key information through decryption of the detected encryption key information, and reproducing the record information only if the extracted identification information matches the detected information (7:19-9:52).

14. Regarding claim 26, Osawa et al. disclose varying a mode of substitution by using the identification information, and extracting the substitute information the detected substituted recording information based on the mode of substitution (6:64-7:7).

15. Regarding claims 41-47, Osawa et al. disclose a recording position of the recording information is set in advance and is used in common between the information recording apparatus and an information reproducing apparatus (6:37-58 wherein the table of contents determines in advance where the recording information will go and the table of contents is used in both the recording and reproducing apparatus).

### ***Claim Rejections - 35 USC § 103***

Claims 4-7 and 21-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Osawa et al., U.S. 5,930,367 in view of Matyas et al. 4,757,534.

16. Regarding claims 4-6, Matyas et al. disclose encrypting the key information by using the identification information to generate encrypted key information, and performing a predetermined encrypting process to generate encrypted identification information (see column 6, lines 44-65; figure 3, items 26-30).



It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the invention of Matyas et al. with the invention of Osawa et al. in order to increase the copy protection capabilities since ensuring the media was played on a certain computer would in addition to a specific medium, would decrease the chances of the media being copied.

17. Regarding claim 7 and 22, Matyas et al. disclose an encrypting process that uses a predetermined unidirectional encrypting function (see column 11, lines 26-64; column 12, lines 17-27). Note that the public key encryption system inherently includes a unidirectional encrypting function.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the invention of Matyas et al. with the invention of Osawa et al. in order to increase the copy protection capabilities since ensuring the media was played on a certain computer would in addition to a specific medium, would decrease the chances of the media being copied.

18. Regarding claim 21, Matyas et al. disclose obtaining the encryption key information by using encrypted identification information from a predetermined encrypting process, and recording the encrypted key information in the medium (see column 6, lines 44-65; figure 3, items 26-30); and decrypting the detected key information by using the encrypted identification information obtained from the encrypting process (column 9, lines 4-22; column 11, line 65 - column 12, line 16).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the invention of Matyas et al. with the invention of Osawa et al. in order to

increase the copy protection capabilities since ensuring the media was played on a certain computer would in addition to a specific medium, would decrease the chances of the media being copied.

19. Regarding claims 23 and 24, Matyas et al. disclose generating the substitute information using the encrypted identification information obtained by the predetermined unidirectional encrypting process to the identification information (see abstract; column 4, line 58 - column 5, line 7; column 6, line 59-65; column 11, lines 26-64; column 12, lines 17-27; figures 2-4); extracting the encrypted identification information from the extracted substitute information, and decrypting the information by a corresponding decrypting process, and reproducing the record information only if the generated identification information matches the detected information (see column 7, line 67 - column 8, line 16; column 9, lines 4-22; column 11, line 65 - column 12, line 16; figures 8 and 9).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the invention of Matyas et al. with the invention of Osawa et al. in order to increase the copy protection capabilities since ensuring the media was played on a certain computer would in addition to a specific medium, would decrease the chances of the media being copied.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin D. Sandoval whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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